

jean-françois pamb Brun

researcher | engineer | software developer

about

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canada

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github://jpamb Brun
http://jfpb.net

languages

french/english

programming

java, javascript
matlab, python
linux, git, c, c++
latex, tensorflow

standards

dicom, ihe, hl7
jpeg 2000, jpip

interests

medical imaging
image compression
deep learning
rendering

education

| | | |
|-----------|--|---------------------------------------|
| 2011-2016 | Ph.D. in electrical engineering <i>improving medical image compression and transmission</i> | École de technologie supérieure (ÉTS) |
| 2009-2010 | M.Sc. in electrical engineering (incomplete†) <i>evaluation of the diagnostic quality of lossy compressed medical images</i> | École de technologie supérieure (ÉTS) |
| 2005-2009 | B.ing. in electrical engineering <i>information technologies and telecommunication</i> | École de technologie supérieure (ÉTS) |

experience

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|----------------|--|---------------------------------------|
| 2016 (dec-) | software developer <i>cloud-based diagnostic workstation with client-side MPR</i> | nucleus.io |
| 2016 (jun-dec) | postdoctoral fellow <i>MR-TRUS fusion and segmentation using deep neural networks</i> | CHUM research centre |
| 2009-2016 | lecturer <i>procedural programming (inf1005a)</i> <i>software development environment (ele116)</i> <i>image processing and analysis (ele747)</i> | École polytechnique de montréal & ÉTS |
| 2007-2014 | teaching assistants <i>healthcare distributed systems (gts840)</i> <i>software development environment (ele116)</i> <i>image processing and analysis (ele747)</i> | École de technologie supérieure (ÉTS) |
| 2009 (01-09) | software developer <i>head-up display simulation for military flight simulators</i> | CAE inc. |
| 2006-2008 | research assistant <i>implementation of a standard compliance validation tool for hl7v3</i> <i>implementation and evaluation of a medical image streaming framework</i> | École de technologie supérieure (ÉTS) |

awards

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|------|---|-----------|
| 2017 | NSERC postdoctoral fellowship (declined) | 90,000\$ |
| 2017 | FRQNT postdoctoral fellowship (declined) | 70,000\$ |
| 2016 | GRSTB postdoctoral fellowship | 18,000\$ |
| 2011 | NSERC doctoral Alexander-Graham-Bell scholarship | 105,000\$ |
| 2011 | ÉTS excellence graduate student scholarship | 60,000\$ |
| 2011 | FRQNT doctoral research scholarship (declined) | 60,000\$ |
| 2009 | FRQNT master's research scholarship | 30,000\$ |
| 2006 | NSERC undergraduate student research awards | 4,500\$ |

† not a member of the OIQ

‡ fast-track doctoral
admission without obtaining
a master's degree

publications

articles in peer-reviewed journals

The utilization of MRI in the operating room

Ménard C , Pambrun J-F, Kadoury S

Brachytherapy. *Elsevier*, 2017

Computed Tomography Image Compressibility and Limitations of Compression Ratio-Based Guidelines

Pambrun J.F. , Noumeir R.

Journal of Digital Imaging. *Springer Science*, 2015

Teaching DICOM by Problem Solving.

Noumeir R. , Pambrun J.F.

Journal of Digital Imaging. *Springer Science*, 2012

Streaming of medical images using JPEG2000 interactive protocol

Pambrun J.F. , Noumeir R.

International Journal of Innovative Computing and Applications. 2012

Using JPEG 2000 Interactive Protocol to Stream a Large Image or a Large Image Set

Noumeir R. , Pambrun J.F.

Journal of Digital Imaging. *Springer Science*, 2010

international peer-reviewed conferences/proceedings

Limitations of the SSIM quality metric in the context of diagnostic imaging

Pambrun J.F. , Noumeir R.

IEEE International Conference on Image Processing (ICIP), 2015

Compressibility variations of JPEG2000 compressed computed tomography

Pambrun J.F. , Noumeir R.

IEEE International Conference of the Engineering in Medicine and Biology Society (EMBC), 2013

Perceptual quantitative quality assessment of JPEG2000 compressed ct images with various slice thicknesses

Pambrun J.F. , Noumeir R.

IEEE International Conference on Multimedia and Expo, 2011

Interoperability testing of integration profiles based on HL7 standard version 3

Pambrun J.F. , Noumeir R.

IEEE International Conference on Information Technology and Applications in Biomedicine, 2010

Hands-on Approach for Teaching HL7 version 3

Noumeir R. , Pambrun J.F.

IEEE International Conference on Information Technology and Applications in Biomedicine, 2010

Streaming of Medical Images Using JPEG 2000 Interactive Protocol

Noumeir R. , Pambrun J.F.

IEEE International Conference on Systems, Signals and Image Processing. 2010

Interoperability Testing Software for Sharing Medical Documents and Images

Berube R. , Pambrun J.F, Noumeir R.

IEEE International Conference on Internet and Web Applications and Services. 2010

Images within the Electronic Health Record

Noumeir R. , Pambrun J.F.

IEEE International Conference on Image Processing. 2009